



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

APPELLANTS' REPLY BRIEF ON APPEAL

APPELLANTS:	Yoshimasi Saitoh et al.	OLD DOCKET NO.:	P99,2475
		NEW DOCKET NO.:	09792909-4457
SERIAL NO.:	09/496,656	GROUP ART UNIT:	1772
DATE FILED:	February 3, 2000	EXAMINER:	Sow Fun Hon
INVENTION:	"METHOD OF FABRICATING LIQUID CRYSTAL DISPLAY DEVICE, AND LIQUID CRYSTAL DISPLAY DEVICE"		

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

In accordance with the provisions of 37 C.F.R. §41.41, Appellants submit this Reply Brief on Appeal in response to the Examiner's Answer mailed on March 21, 2007. Appellants respectfully submit that the Examiner's assertions are incorrect as a matter of fact and law. Thus, for the reasons set forth below, Appellants respectfully request that this Board reverse the rejection of claims 8-11 and 13 under 35 U.S.C. §103.

I. STATUS OF CLAIMS:

Claims 1-11 and 13 are pending in the application. Claims 1-7 are withdrawn from consideration as being directed to a non-elected invention.

The present appeal is directed to claims 8-11 and 13, which were finally rejected in an Office Action dated June 22, 2006. A copy of the claims are appended to Appellants' Main Brief on Appeal as an Appendix.

A copy of claims 1-11 and 13 is appended hereto as the Claims Appendix.

The status of the claims on appeal is as follows:

Claims 8-11 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Gibbons* (U.S. Patent No. 6,307,609)("Gibbons") in view of *Park* (U.S. Patent No. 5,998,101)("Park.")

II. GROUND OF REJECTION TO BE REVIEWED ON APPEAL:

Claims 8-11 and 13 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Gibbons* (U.S. Patent No. 6,307,609)(“*Gibbons*”) in view of *Park* (U.S. Patent No. 5,998,101)(“*Park*.”)

III. ARGUMENT:

Claims 8-11 and 13 stand rejected under 35 U.S.C. §103 by the Examiner as being rendered obvious based on various references. As set forth more clearly below, the rejection of the claims set forth by the Examiner under 35 U.S.C. §103 is improper and accordingly the Board should reverse this rejection.

Claims 8-11 and 13 are not rendered obvious under 35 U.S.C. §103(a) based on the teachings of *Gibbons* in view of *Park*

Appellants respectfully submit that the Examiner's assertions are incorrect as a matter of fact and law. Thus, for the reasons set forth below, Appellants respectfully request that this Board reverse the rejection of claims 8-11 and 13 under 35 U.S.C. §103(a) as being unpatentable over *Gibbons* in view of *Park*.

A. Nowhere does *Gibbons* suggest that a particular exposure ratio can be used to achieve a particular pre-tilt angle

Gibbons fails to disclose or suggest a ratio of exposure energy during a first polarized UV rays exposure to that of a second polarized UV rays exposure of 5:1. The Examiner argues that *Gibbons* suggests Appellants' claimed exposure ratio. Appellants disagree.

As discussed previously, *Gibbons* fails to teach Appellants' claimed ratio of exposure energies of 5:1. Instead, *Gibbons* only describes exposure ratios of 4:1 or less.¹ The Examiner argues that *Gibbons* suggests that an exposure ratio of 5:1 can be used to achieve a pre-tilt angle greater than or equal to 3.5. *Examiner's Answer*, page 7. Appellants disagree. Nowhere does *Gibbons* suggest that there is a correlation between exposure ratio and pre-tilt angle. This is simply not discussed in *Gibbons*. Instead, *Gibbons* merely generally describes that exposure yields a pre-tilt angle. *Gibbons* 2:36-38. Nowhere does *Gibbons* suggest that a particular exposure ratio can yield a particular pre-tilt angle. In fact, *Gibbons* fails to even describe a correlation between exposure ratio and pre-tilt angle.

¹ Specifically, *Gibbons* only discusses ratios in the context of the following examples: Example 3 ratio 4:1 (*Gibbons* 12:25); Example 4 ratio 1:4 (*Gibbons* 12:49); Example 5 ratio 4:1 (*Gibbons* 13:6); Example 6 ratio 1:4 (*Gibbons* 13:29); Example 9 ratio 600mJ:892mJ (*Gibbons* 14:53-55); Example 10 ratio 790mJ:405mJ (*Gibbons* 15:12-14); Example 13 ratio 4:1 (*Gibbons* 16:33); Example 14 ratio 4:1 (*Gibbons* 17:13); and Example 15 ratio 4:1 (*Gibbons* 17:59). Thus, *Gibbons* fails to disclose an exposure energies ratio of 5:1.

As *Gibbons* fails to even discuss how an exposure energy ratio can yield a particular pre-tilt angle, Appellants submit that *Gibbons* fails to suggest to one having skill in the art to increase *Gibbons* exposure ratio above 4.1 to achieve a particular pre-tilt angle.

B. The Examiner has used impermissible hindsight to argue that *Gibbons* suggests that a particular exposure ratio can be used to achieve a particular pre-tilt angle

The Examiner has used impermissible hindsight to allege that it would have been obvious to increase *Gibbons*' ratio from 4.1 to 5:1 to achieve a pre-tilt angle of 3.5 or greater. Nowhere does *Gibbons* suggest how to achieve a particular pre-tilt angle, let alone a pre-tilt angle of 3.5 or greater. And nowhere does *Gibbons* suggest that there is a relationship between exposure ratio and pre-tilt angle. This is simply not discussed or suggested in *Gibbons*. The Examiner has used impermissible hindsight to allege that it would have been obvious to increase *Gibbons*' ratio from 4.1 to 5:1 to achieve a pre-tilt angle of 3.5 or greater.

For at least these reasons, *Gibbons* in view of *Park* fails to disclose or suggest claim 8.

Claims 9-11 and 13 depend directly or indirectly from claim 8 and are therefore allowable for at least the same reasons that claim 8 is allowable.

Appellants respectfully request that the Board reverse the rejection.

VIII. CONCLUSION:

For the foregoing reasons, Appellants respectfully submit that the rejection posed by the Examiner is improper as a matter of law and fact. Accordingly, Appellants respectfully request the Board reverse the rejection of claims 8-11 and 13.

Respectfully submitted,

 (Reg. No. 45,034)
Christopher P. Rauch

SONNENSCHN NATH & ROSENTHAL LLP
P.O. Box #061080
Wacker Drive Station - Sears Tower
Chicago, IL 60606-1080
Telephone 312/876-2606
Customer #26263
Attorneys for Appellants